Money & Banks: some poorly understood fundamentals

Josh Ryan-Collins

nef (the new economics foundation)

Just Banking Conference

20th April 2012

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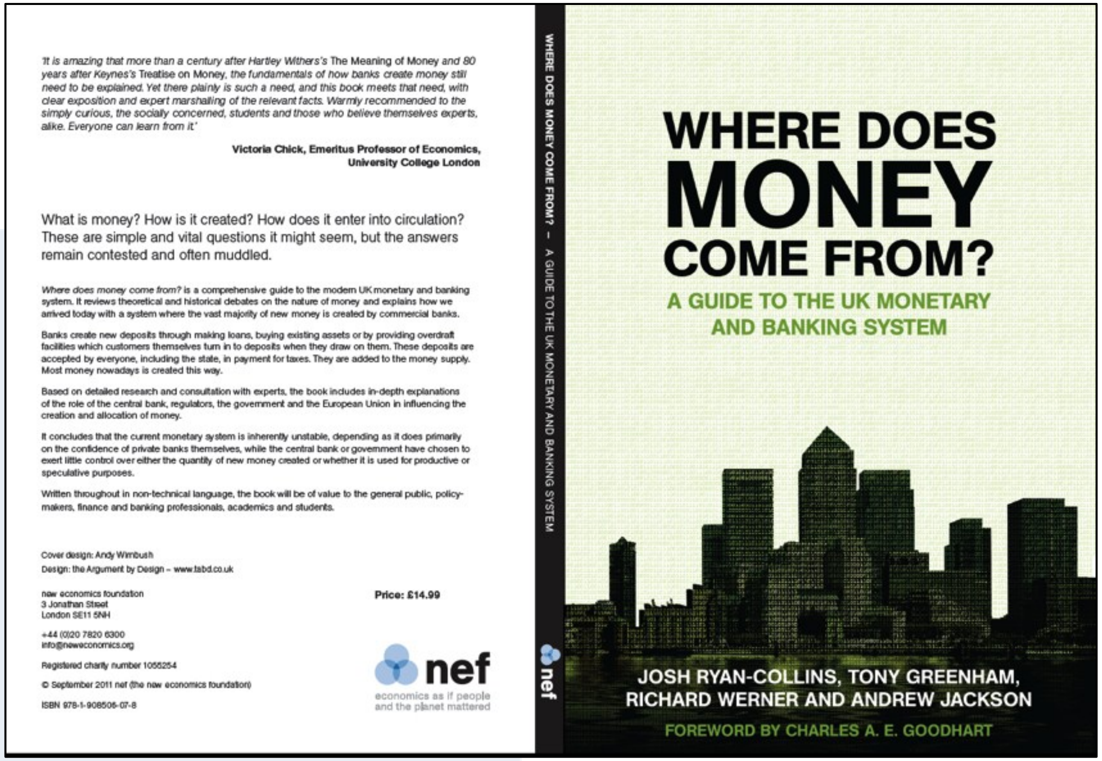

'It is amazing that more than a century after Hartley Withers's The Meaning of Money and 80 years after Keynes's Treatise on Money, the fundamentals of how banks create money still need to be explained. Yet there plainly is such a need, and this book meets that need, with clear exposition and expert marshalling of the relevant facts. Warmly recommended to the simply curious, the socially concerned, students and those who believe themselves experts, alike. Everyone can learn from it'

Victoria Chick, Emeritus Professor of Economics, University College London

What is money? How is it created? How does it enter into circulation? These are simple and vital questions it might seem, but the answers remain contested and often muddled.

Where does money come from? is a comprehensive guide to the modern UK monetary and banking system. It reviews theoretical and historical debates on the nature of money and explains how we arrived today with a system where the vast majority of new money is created by commercial banks.

Banks create new deposits through making loans, buying existing assets or by providing overdraft facilities which customers themselves turn in to deposits when they draw on them. These deposits are accepted by everyone, including the state, in payment for taxes. They are added to the money supply. Most money nowadays is created this way.

Based on detailed research and consultation with experts, the book includes in-depth explanations of the role of the central bank, regulators, the government and the European Union in influencing the creation and allocation of money.

It concludes that the current monetary system is inherently unstable, depending as it does primarily on the confidence of private banks themselves, while the central bank or government have chosen to exert little control over either the quantity of new money created or whether it is used for productive or speculative purposes.

Written throughout in non-technical language, the book will be of value to the general public, policy-makers, finance and banking professionals, academics and students.

Cover design: Andy Wimbush
Design: the Argument by Design – www.tabd.co.uk

Price: £14.99

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Registered charity number 1055254

ISBN 978-1-908506-07-8

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WHERE DOES MONEY COME FROM? – A GUIDE TO THE UK MONETARY AND BANKING SYSTEM
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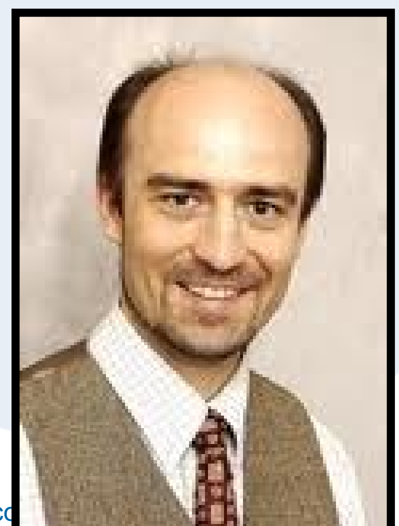
WHERE DOES MONEY COME FROM?

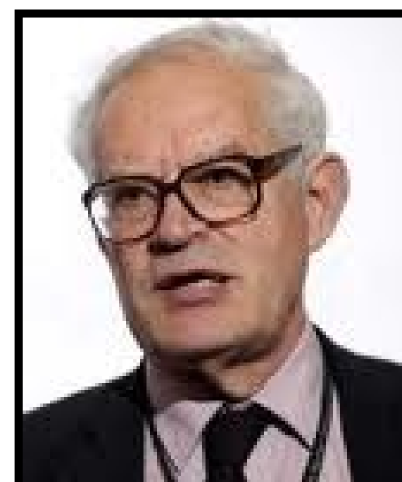
A GUIDE TO THE UK MONETARY AND BANKING SYSTEM

JOSH RYAN-COLLINS, TONY GREENHAM, RICHARD WERNER AND ANDREW JACKSON

FOREWORD BY CHARLES A. E. GOODHART



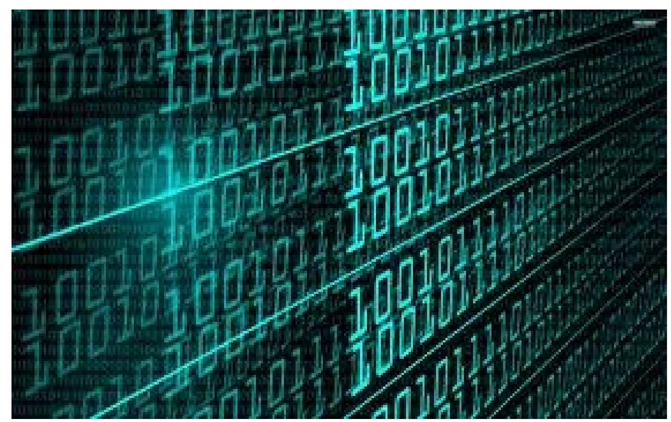
www.neweconomics.org/publications/where-does-money-come-from



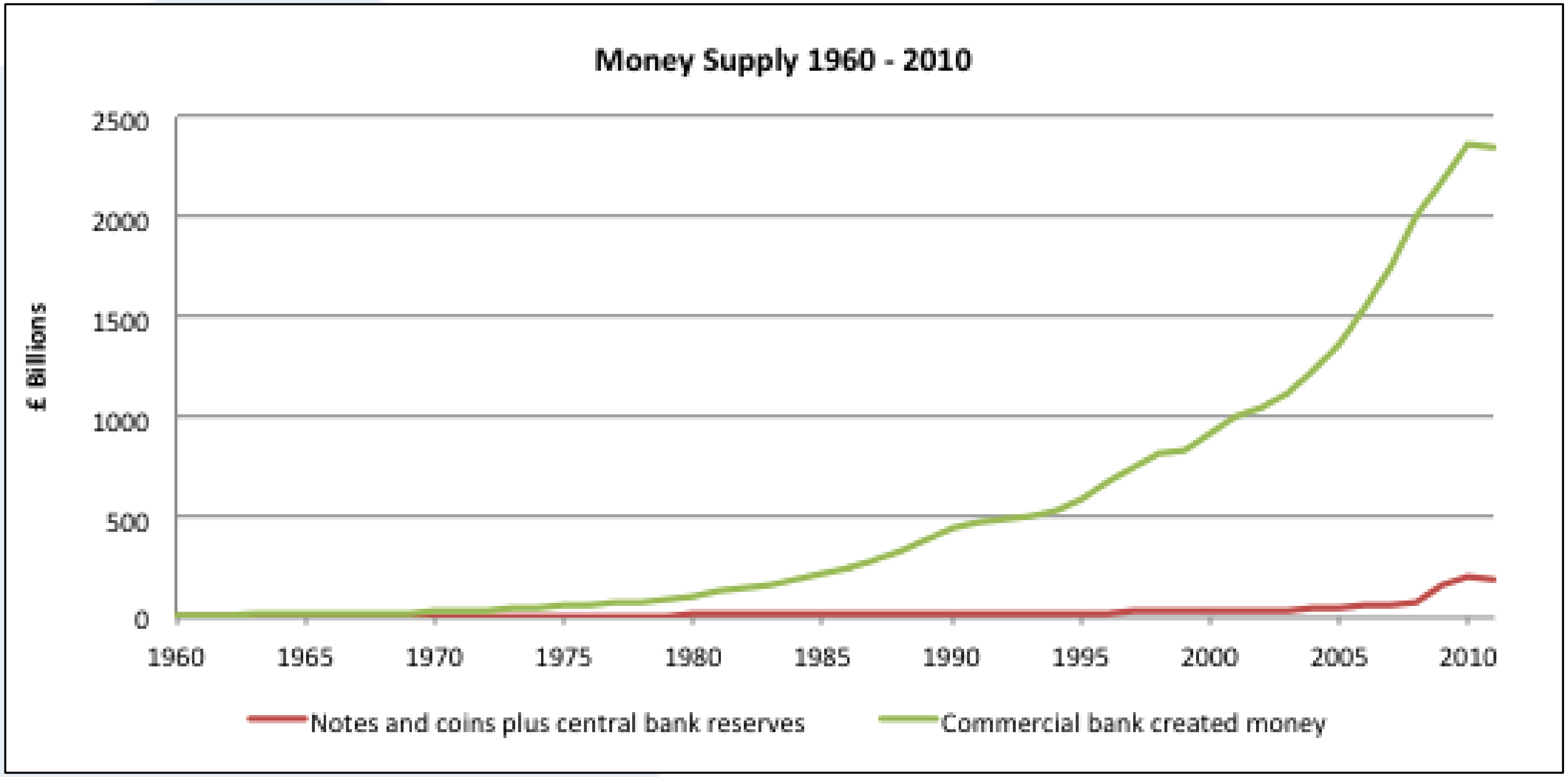
A few questions of minor importance

1. What is money?
2. What do bank’s do?
3. Who decides how much money gets in to the economy?
4. Who decides where it goes?

What is money?



Privatisation of money



Source: Bank of England, Interactive Database, data series LPQAUYM (M4), LPQVQKT (notes and coins), YWMB43D (Central bank reserves).

What do banks do?

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Banks *create new money* whenever they expand their balance sheets (aka make 'loans')

Figure 9: Loan by Barclays Bank.

BARCLAYS BANK BALANCE SHEET (Step 1)	
Assets (What the borrowers owe to bank + bank's money)	**Liabilities** (What the bank owes to the depositors + bank's net worth)
Loan to Robert: £10,000	

Figure 10: Bank simultaneously creates a loan (asset) and a deposit (liability).

BARCLAYS BANK BALANCE SHEET (Step 2)	
Assets (What the borrowers owe to bank + bank's money)	**Liabilities** (What the bank owes to the depositors + bank's net worth)
Loan to Robert: £10,000	Robert's new account: £10,000

Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p56

Payment of £500 from Richard to Stuart

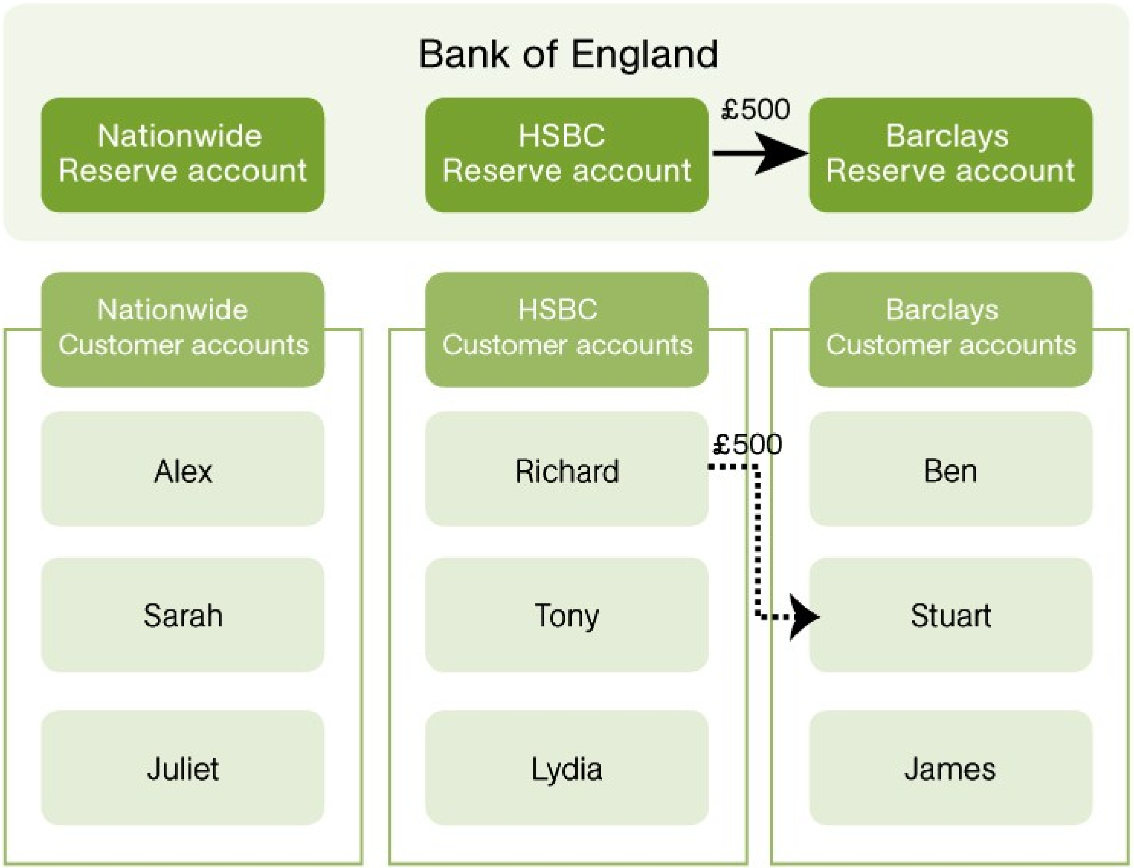
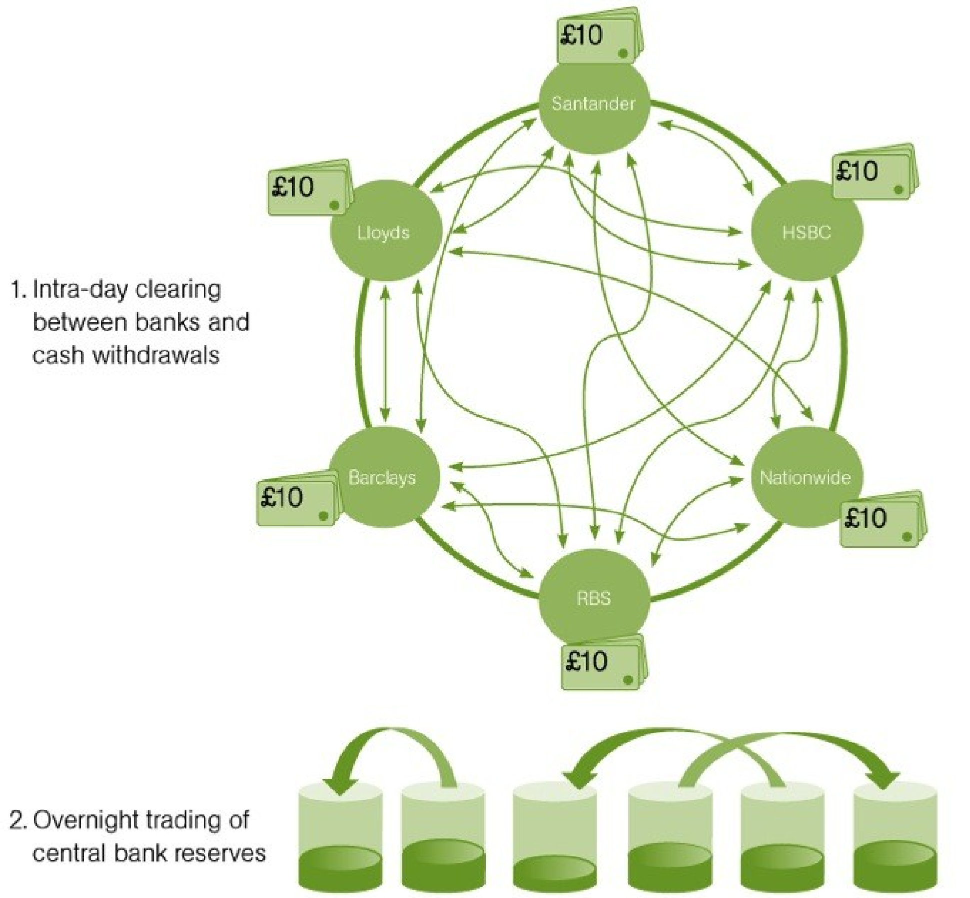


Figure 11: Commercial banks and central bank reserve account with payment.

Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p59

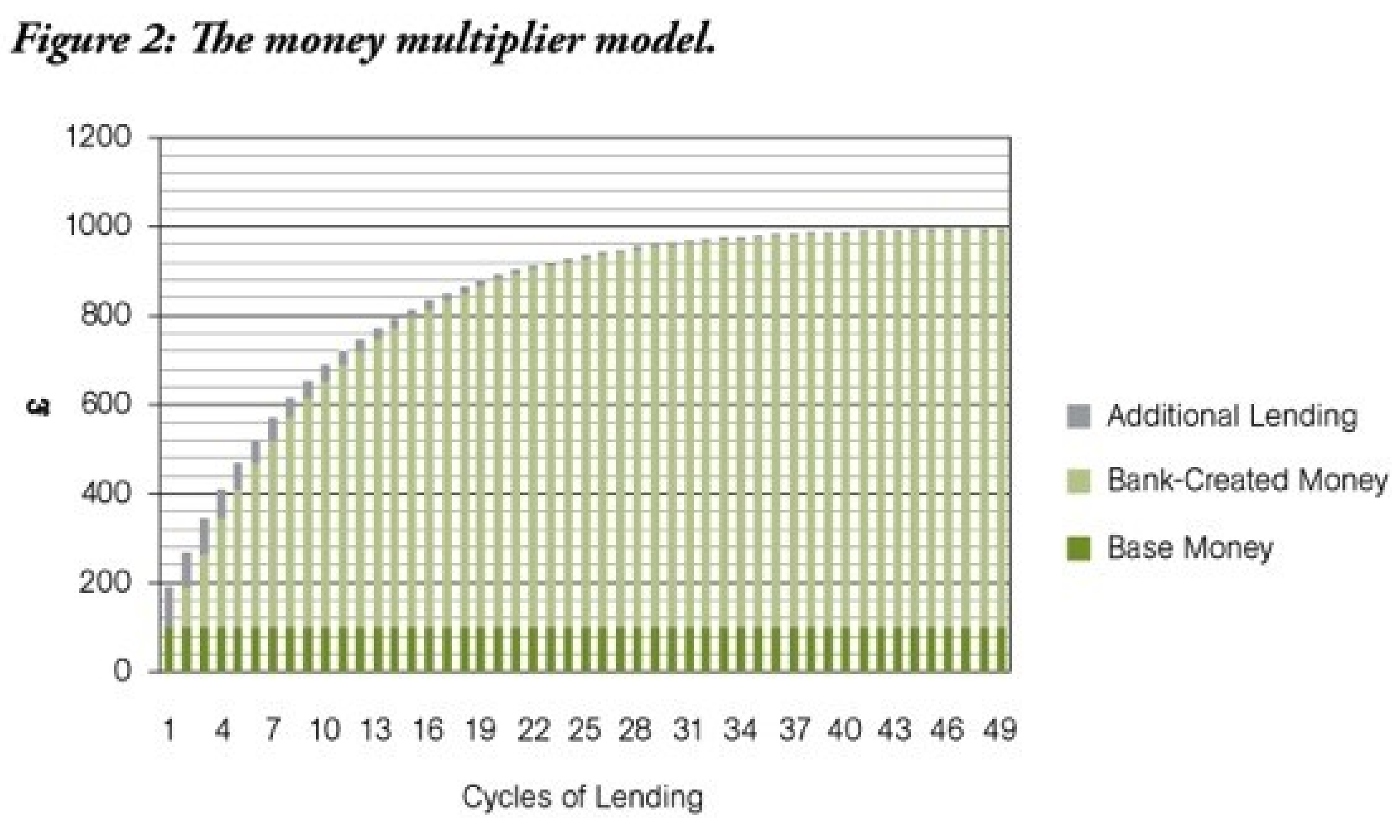
Intra-day clearing & overnight settlement

Figure 13: Simplified diagram of intra-day clearing and overnight trading of central bank reserves between six commercial banks.



Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p63

The myth of the reserve-multiplier



Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p20-21

The tail wags the dog

Figure 4: 'Balloon' of commercial bank money.

Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p23

'In the real world, banks extend credit, creating deposits in the process, and look for the reserves later.'

Alan R. Holmes, Federal Reserve Bank of New York (1969)

'In reality the sequence works more in the opposite direction with banks taking first their credit decisions and then looking for the necessary funding and reserves of central bank money.'

Vitor Constancio, vice president of the European Central Bank (2011)

Banks need our deposits to 'balance the books'

BALANCE SHEET FOR COMMERCIAL BANK		
Assets £	**Liabilities £**	
Loans to customers Reserves at the BoE Cash Financial assets (e.g. government securities) Other assets (e.g. buildings, investments)	Customers deposits	
	Loans from other financial institutions	
	Capital	Equity capital: • share capital • retained profits
		Provisions Subordinated debt (liability to bondholders)
TOTAL LIABILITIES = TOTAL ASSETS		

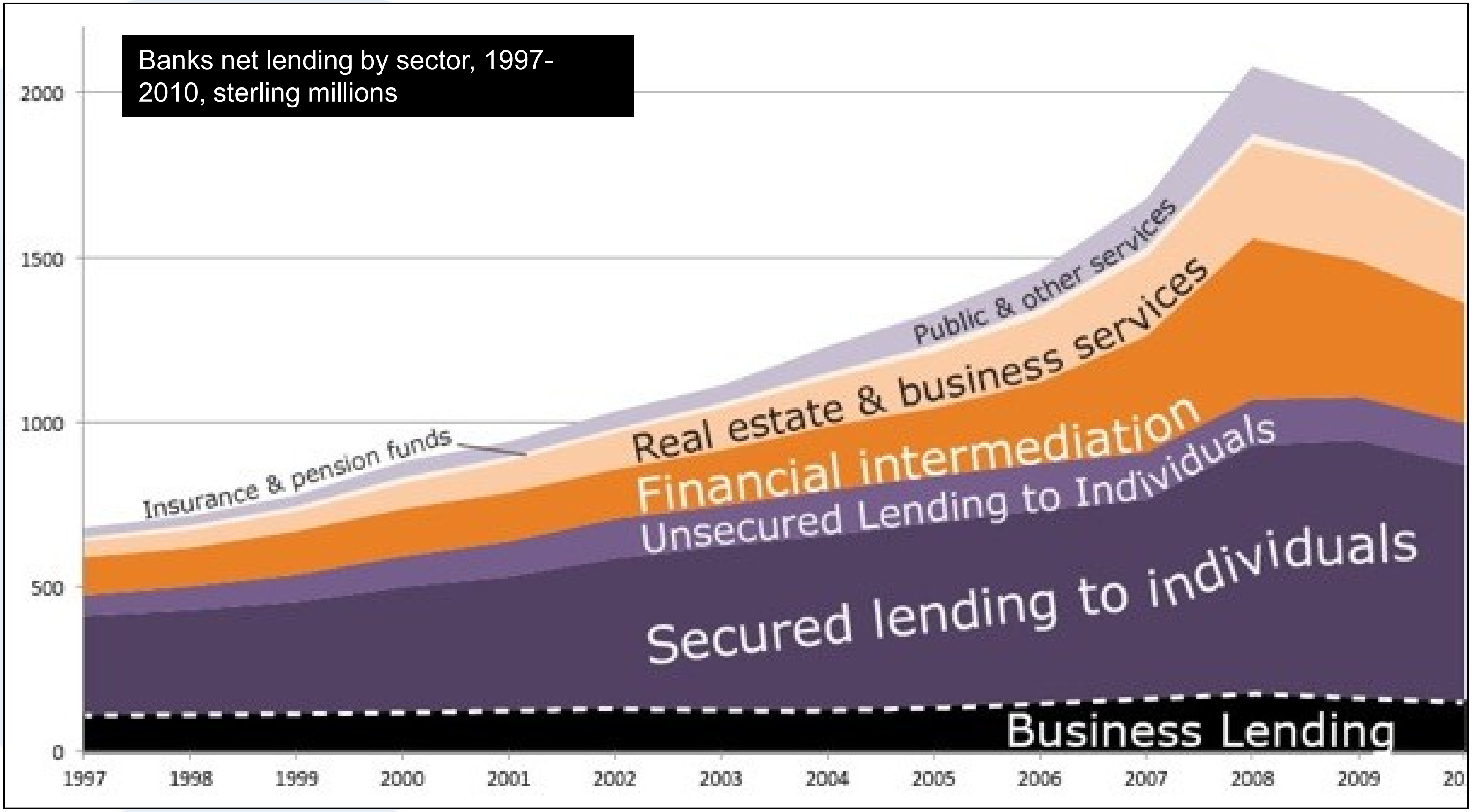
Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p75

Banks decide where money goes

'Both [households and companies] are, to a greater or lesser degree, rationed in their access to credit, given that borrowers know a great deal more about their conditions and prospects than do risk-averse lenders, and that lenders face obstacles in ensuring that borrowers honor their contracts.'

Paul Tucker, Deputy Governor, Bank of England, 2010, 'Money and credit: banking and the macro-economy', Bank of England, Quarterly Bulletin, Q1, p97

Bank lending is driven by confidence and profit



Source: Bank of England Statistical Database and Positive Money

More information

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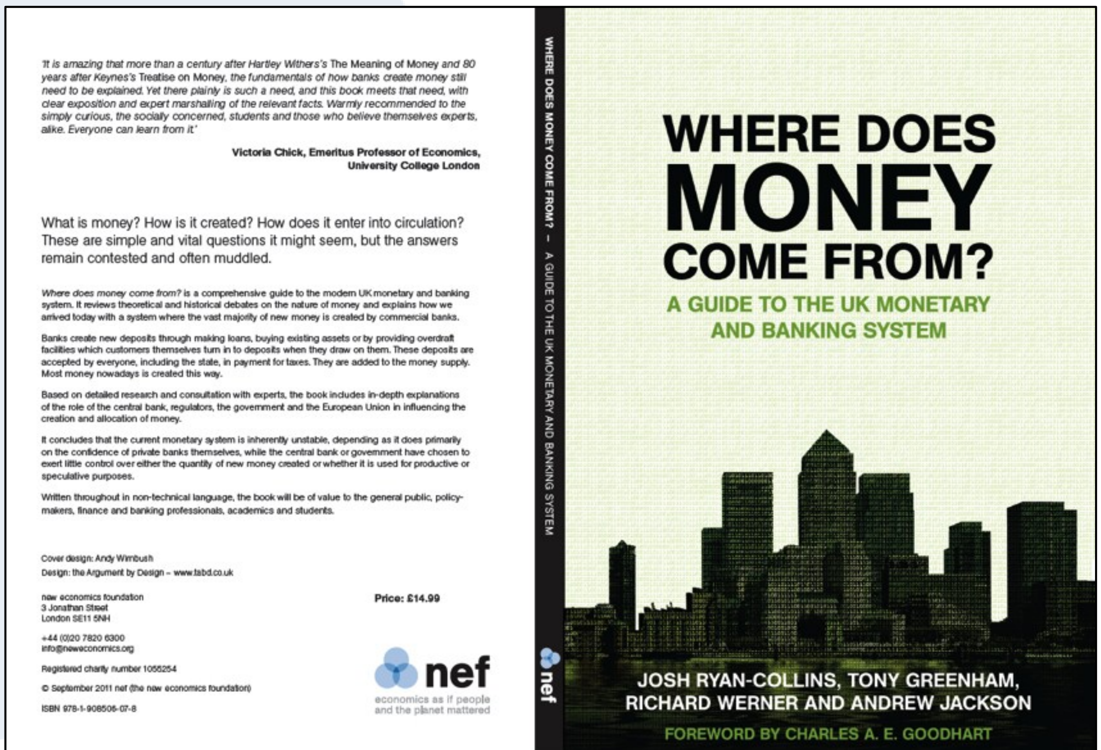
- www.neweconomics.org/projects/monetary-reform



View from the Bank…

- *"Refreshing and clear. The way monetary economics and banking is taught in many – maybe most - universities is very misleading and what your book does is help people explain how the mechanics of the system work."*

Professor David Miles,

Monetary Policy Committee,

Bank of England.

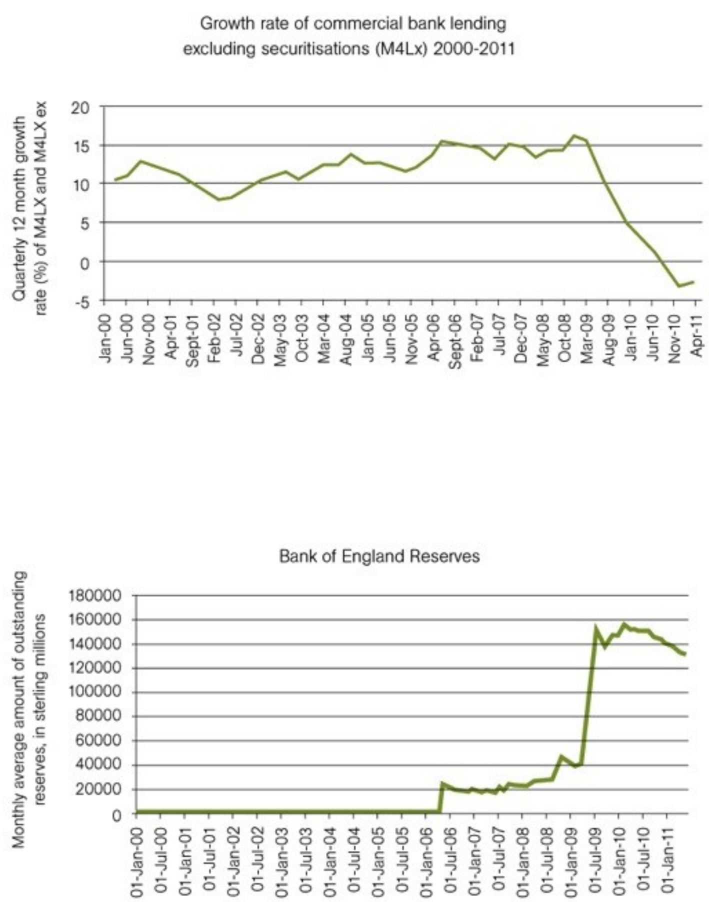
Joseph Schumpeter, 1954:

"It proved extraordinarily difficult for economists to recognize that bank loans and bank investments do create deposits."

Schumpeter, J. A. (1954). History of economic analysis, Allen & Unwin, p1114.

‘Relationship’ between ‘monetary base’ and bank credit creation

Figure 5: Collapse of commercial bank lending growth rate (M4L) and increase in central bank Reserves since Financial Crisis.



(Source: Bank of England)

Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p20-21

Money is a social relationship of credit and debt

- unit of account, means of exchange, store of value, means of final settlement
- Classical/neoclassical economics: a ‘neutral veil’ lying over the ‘real’ economy (exchange/production)
- Truth: social relation (of credit and debt) determined in an abstract money of account (Innes 1913; Ingham 2004)
- The state/monarch has been *determining* the money of account for over 4000 years (Keynes 1931)
- i.e. money (credit/debt) *precedes* the capitalist market economy (Graeber 2011)

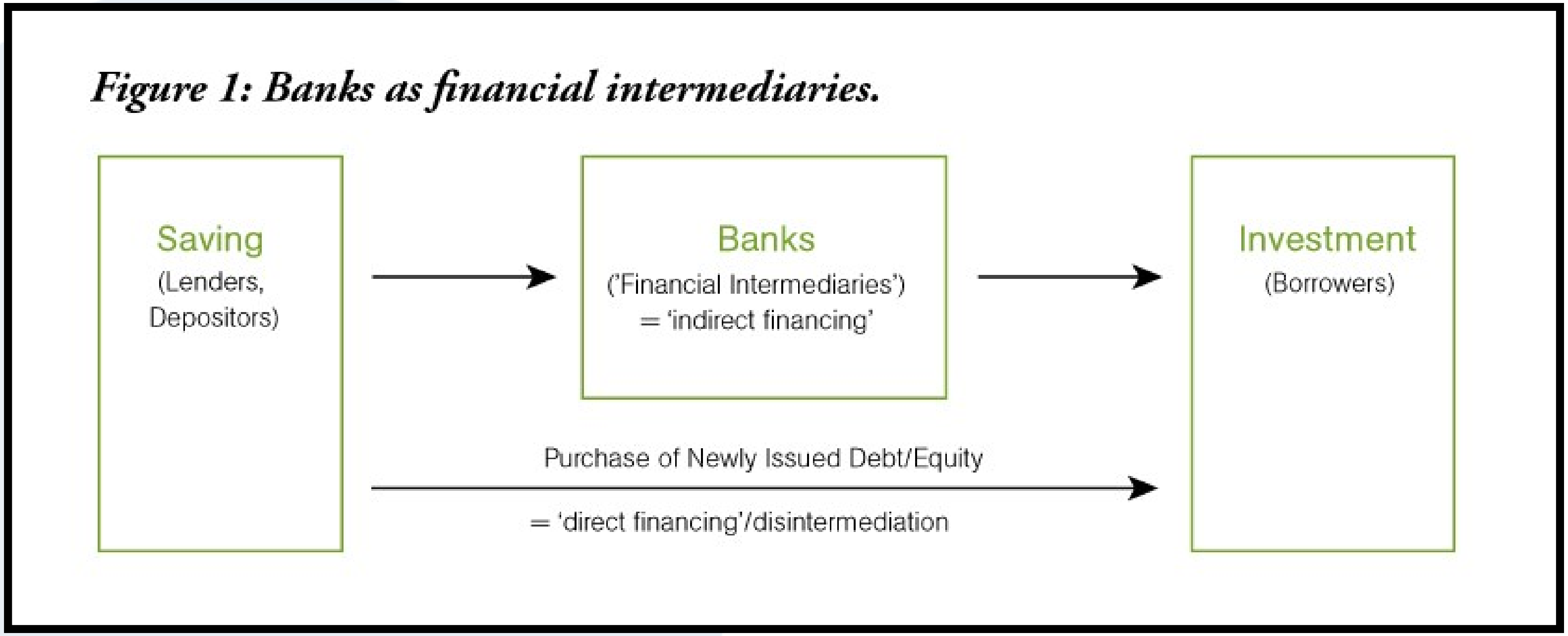
Truth: Banks create deposits (money) whenever they expand their balance sheets through:

- Making 'loans' (direct credit creation)
- Fulfilling overdrafts (indirect credit creation)
- Buying existing financial assets (bonds, buildings, etc.)

AND:

- banks *destroy* money whenever loans/overdrafts are repaid
- if the rate of repayment exceeds the rate of loan extension, the money supply *contracts*

Myth no. 2: Banks are intermediaries



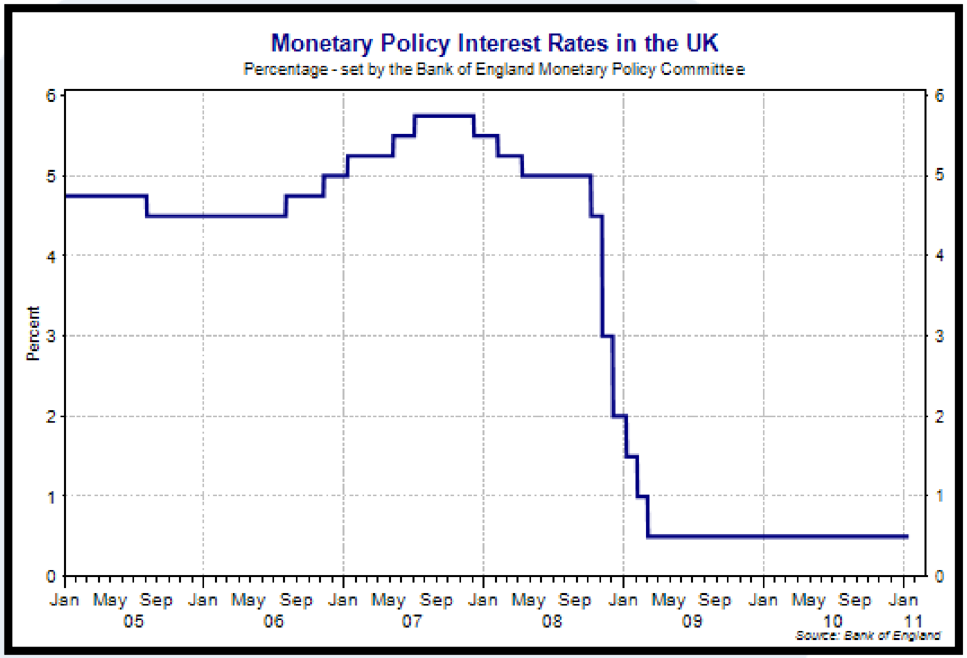
Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p13

Independent Commission on banking, 2011

- *Banks take their aggregated deposits as a funding base from which they make loans to those that require them…* (Issues Paper, Appendix p.48)

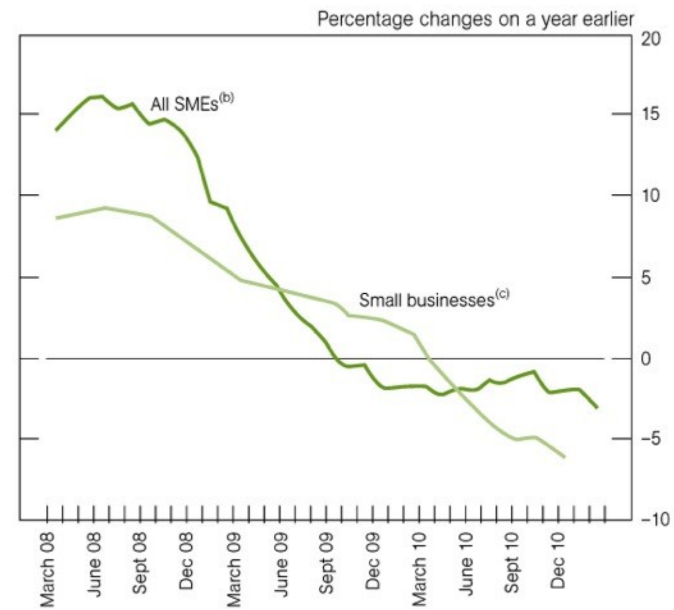
- *Banks fund illiquid, risky loans with demand deposits.* (Final report, page Appendix, p271)

Myth number 4: Bank of England can directly affect credit creation through changing interest rates



- BBA: growth rate of lending to small businesses only: -10% (June 2011)
- BIS: annual growth rate of SME lending: -5% (Aug 2011)

Figure 20: Lending to small and medium-sized enterprises.



Sources: BBA, BIS and Bank calculations.

(a) Non seasonally adjusted
(b) Source: monthly BIS survey. Lending by four UK lenders to enterprises with annual bank account debit turnover less than £25 million. Data cover lending in both sterling and foreign currency, expressed in sterling terms.
(c) Source: BBA. Lending by seven UK lenders to commercial businesses with an annual bank account debit turnover of up to £1 million. Sterling only. Available at www.bba.org.uk/statistics/amll-business-support-december-2010/small-business/.

Source: Ryan-Collins et al. (2011) *Where does Money Come From?*, **nef** (the new economics foundation), p109

Myth no 5: credit allocation is demand driven

- "We would lend to small businesses but they don't want our loans"

Myth 6: banks (the market?) know what's best for the economy

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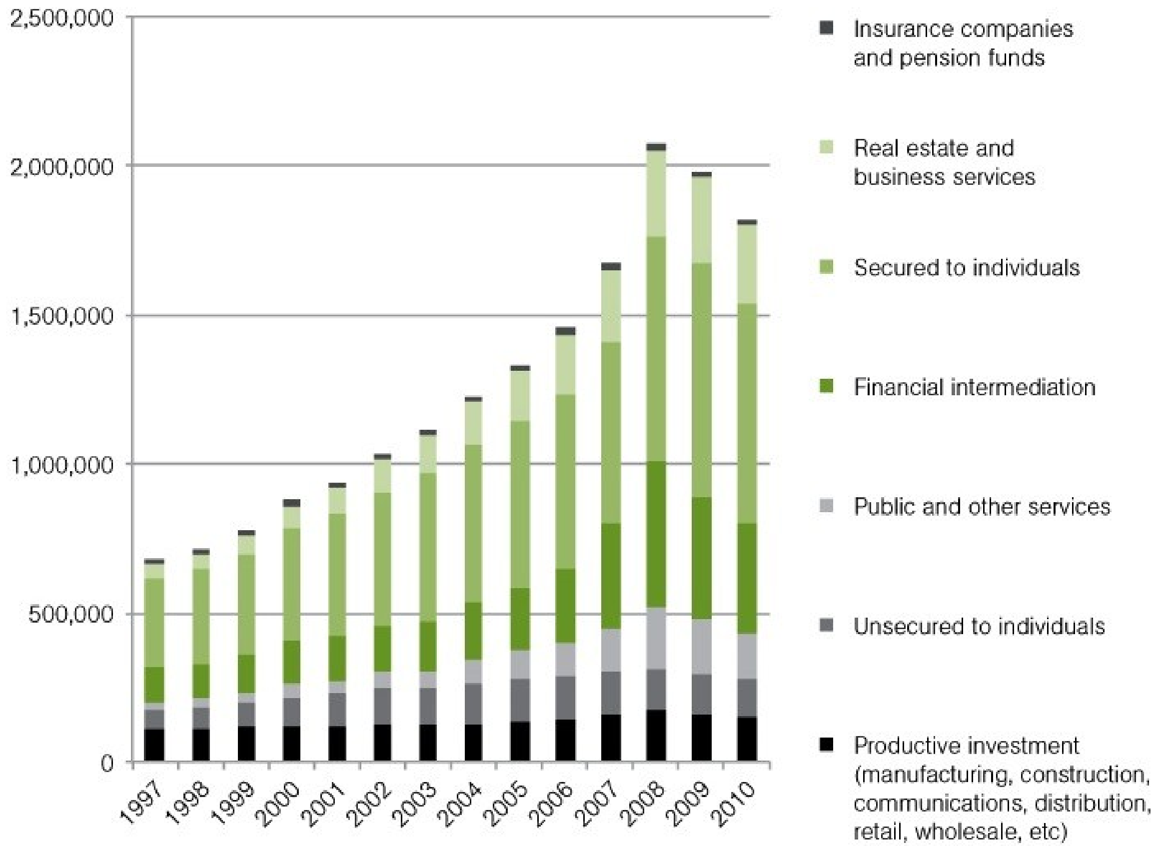
Truth: banks lending increasingly 'socially useless'

Figure 19: Net lending by UK banks by sector, 1997-2010, sterling millions (Source: Bank of England Statistics- Interactive database)



Myth no 7: if we start controlling credit, we'll be communists!

- 'Most industrialized countries outside of North America imposed direct controls on over the volume of bank lending for some, often most, of the time from 1945 till the 1980s' (Goodhart 1989)
    - 'Credit controls' (UK, U.S.)
    - 'Lending ceilings', 'corset' (UK)
    - '*encadrement du credit*' (France)
    - '*Kredit-Plafondierung*' (Germany, Austria)
    - 'Credit planning scheme' (Thailand
    - 'Window guidance' (Japan and Korea)

See Werner (2005) *The New Paradigm in Macroeconomics;* Charles Goodhart (1989) *Money, Information and Uncertainty*

Some implications for macroeconomics

- Quantity theory of money identity: ***MV=PT***[1]
- Money supply x velocity of money = prices x transactions (nominal GDP)
- Leaves some big economic 'mysteries': 'Greenspan boom' and 'velocity decline'
- Assumes: all *M* goes in to real economy, GDP transactions
- Reality: Bank credit creation also goes to financial sector/circuit – speculation, asset markets

1. Fisher (1911) *The Purchasing Power of Money,* New York: Macmillan

Werner's (1997) disaggregated credit equations

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$MV=PT$[1]

- 1) $\Delta(P_R Y) = \Delta C_R V_R$
- Where ΔP_R is change in prices in the real economy (not asset prices), V_R is Velocity in the real economy and ΔC_R is change in credit creation used for transactions in the real economy.)
- 2) $\Delta(P_F Q_F) = \Delta C_F V_F$
- *Y* removed because we know credit creation for transactions in the financial sector does not effect nominal GDP. We replace it with Q_F which is quantity of transactions in the financial sector.

Werner, R (1997) Towards a New Monetary Paradigm: A Quantity theory of disaggregated credit, with evidence from Japan." *Kredit und Kapital* 30(2): 276-309

The financial crisis will not be solved through orthodox policy

- Austerity does not work > falling demand & growth > increasing debt
- Government borrowing does not create ***new*** purchasing power nor add to the money supply (but may allocate funds more effectively)
- May allocate funds more productively (Keynes) but still removes purchasing power from some other area of the economy
- Under EU legislation, only banks permitted to create **new** purchasing power that contributes to GDP growth
- Alternatives:
  - Nationalised bank(s) issuing bonds themselves bought by CB with newly created reserves
  - Government stop issuing bonds and borrow *directly* from banks at low rate of interest (Keynes - WWII)
  - Direct government money issuance ('monetization of fiscal policy')